Claim Amendments

1. (currently amended) A measuring device ~~(7, 13, 14, 15, 32)~~ for measuring changes in at least one position of at least one body edge ~~(5a)~~ of a component ~~(1, 3)~~, the measuring device comprising: ~~having~~ at least one sensor ~~(9)~~ reacting to the changes, wherein ~~characterized in that~~ the measuring device ~~(7, 13, 14, 15, 32)~~ has at least one light source ~~(8)~~, at least one measuring edge ~~(5)~~ that is fixed in relation to the body edge ~~(5a)~~, and at least one light ~~(6)~~ emanating from the light source ~~(8)~~, it being possible for the measuring edge ~~(5)~~ to vary its position by comparison with the light ~~(6)~~ at least from an initial position, and a portion ~~(6a)~~ of the light ~~(6)~~ that has been changed in size by changes in the position by comparison with the initial position of the measuring edge(s) strikes the sensor ~~(9)~~ without impediment.

2. (currently amended) The measuring device of ~~as claimed in~~ claim 1, wherein ~~characterized in that~~ the measuring edge ~~(5)~~ is the body edge ~~(5a)~~.

3. (currently amended) The measuring device of ~~as claimed in~~ claim 2, wherein ~~characterized in that~~ the body edge ~~(5a)~~ delimits a variable passage ~~(4, 37, 38, 39, 40)~~ that passes through the component ~~(1, 3)~~ and through which the portion of the light ~~(6)~~ strikes the sensor ~~(9)~~.

4. (currently amended) The measuring device of ~~as claimed in~~ claim 1, wherein ~~characterized in that in~~ the position of the measuring edge ~~(5)~~ varied from the initial position by comparison with the light ~~(6)~~ at the same time:

- a first portion of the light ~~(6a)~~ strikes the sensor ~~(9)~~ without impediment, and

- at least one second portion ~~(6b)~~ of the light ~~(6)~~ strikes at least the measuring edge ~~(5)~~,

and it being possible for the first portion ~~(6a)~~ and the second portion ~~(6b)~~ of the light ~~(6)~~ to be changed in size relative to one another by changes in the position of the measuring edge ~~(5)~~ from the initial position.

5. (currently amended) The measuring device of ~~as claimed in~~ claim 4, wherein ~~characterized in that in~~ the position of the measuring edge ~~(5)~~ varied from the initial position by comparison with the light ~~(6)~~ at the same time:

- at least two of the second portions ~~(6b)~~ of the light ~~(6)~~ respectively strike the measuring edge ~~(5)~~ at another location,

it being possible for the first portion ~~(6a)~~ and at least one of the second portions ~~(6b)~~ of the light ~~(6)~~ to be changed in size relative to one another by deviations in the position of the measuring edge ~~(5)~~ from the initial position.

6. (currently amended) The measuring device of ~~as claimed in~~ claim 1, wherein ~~characterized in that~~ the light source ~~(8)~~ and the sensor ~~(9)~~ are situated opposite one another and a portion ~~(6b)~~ of the light ~~(6)~~ strikes the measuring edge between the light source ~~(8)~~ and the sensor ~~(9)~~.

7. (currently amended) The measuring device of ~~as claimed in~~ claim 1, further comprising ~~characterized in that~~ a reflector ~~(33)~~ is situated opposite the light source ~~(8)~~, the reflector ~~(33)~~ reflecting the light ~~(6)~~ at least intermittently and at least partially to the sensor ~~(9)~~, and the light ~~(6)~~ striking the measuring edge ~~(5)~~ at least partially between the light source ~~(8)~~ and the reflector ~~(33)~~.

8. (currently amended) The measuring device of ~~as claimed in~~ claim 1, wherein ~~characterized in that~~ the measuring device ~~(13)~~ has a first sensor ~~(9)~~ and at least a second sensor ~~(17)~~, and in the position varied from the initial position of the measuring edge ~~(5)~~ by comparison with the light ~~(6)~~ at the same time:

- a first portion ~~(6a)~~ of the light strikes the first sensor ~~(9)~~ without impediment and in this case,
- at least one second portion ~~(6)~~ of the light ~~(6)~~ strikes at least the measuring edge ~~(5)~~,
- the first portion ~~(6a)~~ and the second portion ~~(6b)~~ of the light ~~(6)~~ being changed in size relative to one another by deviations in the position of the measuring edge ~~(5)~~ from the initial position, and
- the first portion ~~(6a)~~ and the second portion ~~(6b)~~ of the light ~~(6)~~ striking the second sensor ~~(17)~~ at least partially in a fashion equaling the initial state in size and thus independently of the changes in the position.

9. (currently amended) The measuring device of ~~as claimed in~~ claim 8, wherein ~~characterized in that~~ the measuring device ~~(13)~~ has a control device ~~(43)~~, the control device ~~(43)~~ being connected to the second sensor ~~(17)~~ and the light source ~~(8)~~.

10. (currently amended) The measuring device of ~~as claimed in~~ claim 1, wherein ~~characterized in that~~ the measuring device ~~(14)~~ has at least one reference light source ~~(23)~~ with a reference light ~~(44)~~, the reference light ~~(44)~~ equaling at least the light ~~(6a)~~ in an initial position of the measuring edge ~~(5)~~, and in the position of the measuring edge ~~(5)~~ that has been changed relative to the initial position, at the same time:

- a first portion ~~(6a)~~ of the light ~~(6)~~ from the light source ~~(8)~~ strikes the

sensor ~~(9)~~ without impediment,

- at least one second portion ~~(6b)~~ of the light ~~(6)~~ from the light source ~~(8)~~ strikes at least the measuring edge ~~(5)~~, and
- the first portion ~~(6a)~~ and the second portion ~~(6b)~~ are changed in size relative to one another by deviations in the position of the measuring edge ~~(5)~~ from the initial position, and
- the reference light ~~(44)~~, unchanged in comparison to the initial position, of the reference light source ~~(23)~~, strikes the sensor ~~(9)~~ in alternating sequence with the first portion ~~(6a)~~ of the light source ~~(8)~~, changed relative to the initial position.

11. (currently amended) The measuring device of ~~as claimed in~~ claim 1, wherein ~~8, 9 or 10, characterized in that~~ the measuring device ~~(32)~~ has at least one light guiding medium with the aid of which at least portions ~~(6a, 6b)~~ of the light ~~(6)~~ are guided into the measuring device ~~(32)~~.

12. (currently amended) The measuring device of ~~as claimed in~~ claim 11, wherein ~~characterized in that~~ the light guiding medium is in at least one fiber optics cable ~~(34)~~.

13. (currently amended) The measuring device of ~~as claimed in~~ claim 1, wherein ~~characterized in that~~ the component ~~(1, 3)~~ is assigned to at least one rotary and/or linear bearing ~~(35)~~.